

ENVIRONMENTAL QUALITY

CHAPTER 8

AIR QUALITY

Sub-Chapter 11

Visibility Impact Assessment

- Rule 17.8.1101 Definitions
- 17.8.1102 Incorporation by Reference
- 17.8.1103 Applicability--Visibility Requirements
- Rules 17.8.1104 and 17.8.1105 reserved
- 17.8.1106 Visibility Impact Analysis
- 17.8.1107 Visibility Models
- 17.8.1108 Notification of Permit Application
- 17.8.1109 Adverse Impact and Federal Land Manager
- 17.8.1110 Visibility Monitoring
- 17.8.1111 Additional Impact Analysis

Sub-Chapter 11

Visibility Impact Assessment

17.8.1101 DEFINITIONS For the purposes of this subchapter:

(1) "Federal Class I area" means those areas listed in ARM 17.8.806(1) and any other federal land that is classified or reclassified as Class I.

(2) "Adverse impact on visibility" means visibility impairment which the department determines does or is likely to interfere with the management, protection, preservation, or enjoyment of the visual experience of visitors within a federal Class I area. The determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency, and time of visibility impairment, and how these factors correlate with times of visitor use of the federal Class I area, and the frequency and occurrence of natural conditions that reduce visibility.

(3) "Visibility impairment" means any humanly perceptible change in visual range, contrast or coloration from that which would have existed under natural conditions. Natural conditions include fog, clouds, windblown dust from natural sources, rain, naturally ignited wildfires, and natural aerosols. (History: 75-2-111, 75-2-203, MCA; IMP, 75-2-203, 75-2-204, 75-2-211, MCA; NEW, 1985 MAR p. 1326, Eff. 9/13/85; AMD, 1995 MAR p. 535, Eff. 4/14/95; TRANS, from DHES, 1996 MAR p. 2285.)

17.8.1102 INCORPORATION BY REFERENCE (1) For the purposes of this subchapter, the board hereby adopts and incorporates by reference the following:

(a) 40 CFR 81.327, providing attainment status designation for Montana pursuant to section 107 of the Federal Clean Air Act;

(b) "Workbook for Plume Visual Impact Screening and Analysis" (Revised) (EPA-454/R-92/023), specifying methods for estimating visibility impairment.

(2) A copy of materials incorporated by reference in this subchapter is available for public inspection and copying at the Department of Environmental Quality, 1520 E. 6th Ave., P.O. Box 200901, Helena, MT 59620-0901.

(3) Copies of federal materials also may be obtained from:

(a) National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161; phone: (800) 553-6847 or (703) 605-6000; fax: (703) 605-6900; email: orders@ntis.gov; web: <http://www.ntis.gov>;

(b) National Service Center for Environmental Publications (NSCEP), P.O. Box 42419, Cincinnati, OH 45242-0419; phone: (800) 490-9198 or (513) 489-8190; fax (513) 489-8695; email: ncepimal@one.net; web: <http://www.epa.gov/ncepihom>;

(c) U.S. Government Printing Office, Information Dissemination (Superintendent of Documents), P.O. Box 371954, Pittsburgh, PA 15250-7954; phone: (866) 512-1800 or (202) 512-1800; fax: (202) 512-2104; email: orders@gpo.gov; web: <http://www.gpoaccess.gov>; and

(d) the libraries of each of the 10 EPA regional offices.

(4) Copies of the CFR may be obtained from the U.S. government printing office, as described in (3)(c). (History: 75-2-111, MCA; IMP, Title 75, chapter 2, MCA; NEW, 1996 MAR p. 1844, Eff. 7/4/96; TRANS, from DHES, 1996 MAR p. 2285; AMD, 1997 MAR p. 1581, Eff. 9/9/97; AMD, 2005 MAR p. 959, Eff. 6/17/05.)

17.8.1103 APPLICABILITY--VISIBILITY REQUIREMENTS

(1) This subchapter is applicable to the owner or operator of a proposed major stationary source, as defined by ARM 17.8.801(22), or of a source proposed for a major modification, as defined by ARM 17.8.801(20) proposing to construct such a source or modification after July 1, 1985, in any area within the state of Montana designated as attainment, unclassified, or nonattainment, in accordance with 40 CFR 81.327, incorporated by reference in ARM 17.8.1102. The requirements of this subchapter shall be integrated with the requirements of ARM Title 17, chapter 8, subchapters 7 (Permit, Construction and Operation of Air Contaminant Sources) and 8 (Prevention of Significant Deterioration of Air Quality). (History: 75-2-111, 75-2-203, MCA; IMP, 75-2-203, 75-2-204, 75-2-211, MCA; NEW, 1985 MAR p. 1326, Eff. 9/13/85; AMD, 1995 MAR p. 535, Eff. 4/14/95; AMD, 1996 MAR p. 1844, Eff. 7/4/96; TRANS, from DHES, 1996 MAR p. 2285.)

Rules 17.8.1104 and 17.8.1105 reserved

17.8.1106 VISIBILITY IMPACT ANALYSIS (1) The owner or operator of a major stationary source or modification as described in ARM 17.8.1103, shall demonstrate that the actual emissions [as defined by ARM 17.8.801(1)] from the major source or modification (including fugitive emissions) will not cause or contribute to adverse impact on visibility within any federal Class I area or the department shall not issue a permit.

(2) The owner or operator of a proposed major stationary source or major modification shall submit all information necessary to support any analysis or demonstration required by these rules pursuant to ARM 17.8.748. (History: 75-2-111, 75-2-203, MCA; IMP, 75-2-203, 75-2-204, 75-2-211, MCA; NEW, 1985 MAR p. 1326, Eff. 9/13/85; AMD, 1995 MAR p. 535, Eff. 4/14/95; TRANS, from DHES, 1996 MAR p. 2285; AMD, 2002 MAR p. 3567, Eff. 12/27/02.)

17.8.1107 VISIBILITY MODELS (1) All estimates of visibility impact required under this subchapter shall be based on those models contained in "Workbook for Plume Visual Impact Screening and Analysis" (EPA-450/4-88-015, 1988), incorporated by reference in ARM 17.8.1102. Equivalent models may be substituted if approved by the department. (History: 75-2-111, 75-2-203, MCA; IMP, 75-2-203, 75-2-204, 75-2-211, MCA; NEW, 1985 MAR p. 1326, Eff. 9/13/85; AMD, 1992 MAR p. 2741, Eff. 12/25/92; AMD, 1996 MAR p. 1844, Eff. 7/4/96; TRANS, from DHES, 1996 MAR p. 2285.)

17.8.1108 NOTIFICATION OF PERMIT APPLICATION (1) Where a proposed major stationary source or major modification will impact or may impact visibility within a federal Class I area, the department shall provide written notice to the environmental protection agency and to the appropriate federal land managers. Notification shall be in writing, include all information relevant to the permit application including an analysis of the anticipated impacts on visibility in any federal Class I area, and be within 30 days of the receipt of the application.

(2) Where the department receives advance notification of a permit application of a source that may affect federal Class I area visibility, the department will notify all affected federal land managers within 30 days of such advance notice. (History: 75-2-111, 75-2-203, MCA; IMP, 75-2-203, 75-2-204, 75-2-211, MCA; NEW, 1985 MAR p. 1326, Eff. 9/13/85; TRANS, from DHES, 1996 MAR p. 2285.)

17.8.1109 ADVERSE IMPACT AND FEDERAL LAND MANAGER

(1) Federal land managers may present to the department, after the preliminary determination required under ARM 17.8.759, a demonstration that the emissions from the proposed source or modification may cause or contribute to adverse impact on visibility in any federal Class I area, notwithstanding that the air quality change resulting from the emissions from such source or modification would not cause or contribute to concentrations which would exceed the maximum allowable increment defined in ARM 17.8.804 (PSD) for a federal Class I area.

(2) The department will consider the comments of the federal land manager in its determination of whether adverse impact on visibility may result. Should the department determine that such impairment may result, a permit for the proposed source will not be granted.

(3) Where the department finds such an analysis does not demonstrate to the satisfaction of the department that an adverse impact on visibility will result, the department will provide written notification to the affected federal land manager within five days of the department's final decision on the permit. The notification will include an explanation of the department's decision or give notice as to where the explanation can be obtained. (History: 75-2-111, 75-2-203, MCA; IMP, 75-2-203, 75-2-204, 75-2-211, MCA; NEW, 1985 MAR p. 1326, Eff. 9/13/85; AMD, 1995 MAR p. 535, Eff. 4/14/95; TRANS, from DHES, 1996 MAR p. 2285; AMD, 2002 MAR p. 3567, Eff. 12/27/02.)

17.8.1110 VISIBILITY MONITORING

(1) The owner or operator of a proposed major stationary source or major modification shall submit with the application an analysis of existing visibility in or immediately adjacent to the federal Class I area potentially impacted by the proposed project. The validity of the analysis shall be determined by the department.

(2) As necessary to establish visibility conditions within the mandatory Class I area prior to construction and operation of the source or modification, the analysis shall include a collection of continuous visibility monitoring data. Such data shall relate to and shall have been gathered over the year preceding receipt of the complete application, except that if the department determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter than one year, the data that is required must have been gathered over at least that shorter period. Where applicable, the owner or operator may demonstrate that existing visibility monitoring data may be sufficient.

(3) Pursuant to the requirements of this subchapter, the owner or operator of the source shall submit a preconstruction visibility monitoring plan prior to the filing of a permit

application. Within 30 days, the department must, after consultation with the affected federal land manager, review and either approve the monitoring program or specify the changes necessary for approval. If the department fails to act within the 30 days, the monitoring program shall be deemed approved.

(4) The owner or operator of a proposed major stationary source or major modification, after construction has been completed, shall conduct such visibility monitoring as the department may require as a permit condition to establish the effect the source has on visibility conditions within the mandatory Class I area being impacted.

(5) The department may waive the requirements of (1), (2), and (3) of this rule if the value of "V" in the equation below is less than 0.50 or, if for any other reason which can be demonstrated to the satisfaction of the department, an analysis of visibility is not necessary.

$$V = (\text{Emissions})^{1/2} \div \text{Distance}$$

where: Emissions = emissions from the major stationary source or modification of nitrogen oxides, particulate matter, or sulfur dioxide, whichever is highest, in tons per year.

Distance = distance, in kilometers, from the proposed major stationary source or major modification to each federal Class I area.

(History: 75-2-111, 75-2-203, MCA; IMP, 75-2-203, 75-2-204, MCA; NEW, 1985 MAR p. 1326, Eff. 9/13/85; AMD, 1988 MAR p. 826, Eff. 4/29/88; TRANS, from DHES, 1996 MAR p. 2285.)

17.8.1111 ADDITIONAL IMPACT ANALYSIS (1) The owner or operator of a proposed major stationary source or major modification subject to the requirements of ARM 17.8.824 (PSD) shall provide a visibility impact analysis of the visibility impact likely to occur as a result of the major source or major modification and as a result of general commercial, residential, industrial, and other growth associated with the source or major modification. (History: 75-2-111, 75-2-203, MCA; IMP, 75-2-203, 75-2-204, 75-2-211, MCA; NEW, 1985 MAR p. 1326, Eff. 9/13/85; AMD, 1995 MAR p. 535, Eff. 4/14/95; TRANS, from DHES, 1996 MAR p. 2285.)

